

Amendments to the Claims

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3 (canceled)

4. (currently amended) A rotating electric machine comprising:
a plurality of ventilating passages formed between a stator frame and a stator iron core;
coolers provided in said plurality of ventilating passages;
a fan for boosting a coolant;
a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages and is thereafter cooled by some of said coolers; and
a second ventilating circuit in which the coolant boosted by said fan is initially cooled by some of said coolers and is thereafter allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;
wherein at least one ~~ventilating passage~~ of said plurality of ventilating passages which communicates with a central portion of said stator iron core constitutes part of said second ventilating circuit.

5. (currently amended) A rotating electric machine according to claim 4, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second-first ventilating circuit, of said ventilating ducts.

6. (currently amended) A rotating electric machine in which the inside of said machine is cooled by atmospheric air sucked from outside said machine, comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

a fan for boosting a coolant atmospheric air;

a first ventilating circuit in which the atmospheric air boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages; and

a second ventilating circuit in which the atmospheric air boosted by said fan is allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;

wherein a cooler is provided at least in one ventilating passage of said plurality of ventilating passages which constitutes part of said second ventilating circuit communicates with a central portion of said stator iron core constitutes part of said second ventilating circuit so as to cool the atmospheric air boosted by said fan prior to flow thereof to said stator iron core in the direction from the outer to the inner peripheral side.

7. (currently amended) A rotating electric machine according to claim 6, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said ~~second~~first ventilating circuit, of said ventilating ducts.

8. (currently amended) A rotating electric machine comprising:
a plurality of ventilating passages formed between a stator frame and a stator iron core;

coolers provided in said plurality of ventilating passages;
a fan for boosting the coolant;
a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core to some of said ventilating passages and is thereafter cooled by some of said coolers; and

a second ventilating circuit in which the coolant boosted by said fan and branched from said first ventilating circuit is initially cooled by some of said coolers, and is thereafter allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core;

wherein at least one ~~ventilating passage~~ of said plurality of ventilating passages ~~constitutes part of said second ventilating circuit and which~~ communicates with a central portion of said stator iron core constitutes part of said second ventilating circuit.

9. (currently amended) A rotating electric machine according to claim 8, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said ~~second~~first ventilating circuit, of said ventilating ducts.

10. (currently amended) A rotating electric machine in which the inside of said machine is cooled by a coolant enclosed therein, comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

coolers provided in said plurality of ventilating passages;

a fan for boosting a coolant;

a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages and is thereafter cooled by some of said coolers; and

a second ventilating circuit in which the coolant boosted by said fan is initially cooled by some of said coolers and is thereafter allowed to flow to said stator iron core in the direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said, ventilating passages;

wherein at least one ~~ventilating passage~~ of said plurality of ventilating passages and which communicates with a central portion of said stator iron core constitutes part of said second ventilating circuit.

11. (currently amended) A rotating electric machine according to claim 10, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second-first ventilating circuit, of said ventilating ducts.

12. (currently amended) A rotating electric machine in which the inside of said machine is cooled by atmospheric air sucked from outside said machine, comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

a fan for boosting ~~a coolant~~ atmospheric air;

a first ventilating circuit in which atmospheric air boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages; and

a second ventilating circuit in which atmospheric air boosted by said fan is allowed to flow to said stator iron core in a direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;

wherein a cooler is provided at least ~~on a portion of~~ in a ventilating passage for communicating an atmospheric air suction hole to one ~~ventilating passage of~~ which communicates with a central portion of said ~~stator iron core and~~ which constitutes part of ~~second~~ ventilating circuit and ~~which communicates with a central portion of said stator iron core so as to cool the~~ atmospheric air boosted by said fan prior to flow thereof to said stator iron core in the ~~direction from the outer to the inner peripheral side~~.

13. (currently amended) A rotating electric machine according to claim 12, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said ~~second~~ first ventilating circuit, of said ventilating ducts.

14. (currently amended) A rotating electric machine comprising:

a plurality of ventilating passages formed between a stator frame and a stator iron core;

coolers provided in said plurality of ventilating passages;

a fan for boosting a coolant;

a first ventilating circuit in which the coolant boosted by said fan is introduced from the inner peripheral side of said stator iron core into some of said ventilating passages and is thereafter cooled by some of said coolers; and

a second ventilating circuit in which the coolant boosted by said fan is initially cooled by some of said coolers and is thereafter allowed to flow to said stator iron core in a direction from the outer peripheral side to the inner peripheral side of said stator iron core via some of said ventilating passages;

wherein at least one ~~ventilating passage~~ of said plurality of ventilating passages which constitutes part of said second ventilating circuit and communicates with a central portion of said stator iron core constitutes part of said second ventilating circuit; and

said coolers provided in said first ventilating circuit and ~~said coolers~~ in said second ventilating circuit are opposed to each other with a rotating shaft disposed therebetween.

15. (currently amended) A rotating electric machine according to claim 14, wherein said stator iron core has a plurality of ventilating ducts which continuously extend in a radial direction and which are arranged in an axial direction; and

axial intervals between those, constituting part of said second ventilating circuit, of said ventilating ducts are smaller than axial intervals between those, constituting part of said second-first ventilating circuit, of said ventilating ducts.